Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of configuring a packet-switched network comprising the steps of:

(i) receiving a request to establish a traffic engineering tunnel across the packet-switched network;

(ii) at a router traversed by the traffic engineering tunnel, creating a queue for packets carried inside the traffic engineering tunnel; and

(iii) reserving bandwidth for the queue in accordance with the request to establish the traffic engineering tunnel, wherein the queue created for packets carried inside the traffic engineering tunnel is given priority over other traffic at the router and the reserved bandwidth for the queue can only be used by packets carried inside the traffic engineering tunnel.

2. (Original) The method of claim 1 wherein packets are identified as being carried inside the traffic engineering tunnel by a label in the packet and wherein the queue is associated with the label.

3. (Original) The method of claim 1 wherein the queue is shared between two or more traffic engineering tunnels.

4. (Original) The method of claim 3 wherein the reserved bandwidth for the queue comprises a sum of bandwidth reserved for each of the two or more traffic engineering tunnels.

5. (Original) The method of claim 3 wherein the queue is an input queue and wherein the queue is shared between two or more traffic engineering tunnels with a same head end router.

6. (Original) The method of claim 3 wherein the queue is an output queue and wherein the queue is shared between two or more traffic engineering tunnels with a same tail end router.

7. (Original) The method of claim 2 wherein the label is an MPLS TE label.

8. (Original) A method of routing packets in a packet-switched network comprising the steps of:

(i) receiving a packet at an incoming interface of a router;

(ii) determining whether the packet has a label identifying a traffic engineering tunnel, thereby identifying that the packet is being carried inside the traffic engineering tunnel;

(iii) where the packet is being carried inside the traffic engineering tunnel, sending the packet to a queue associated with the label so that the packet in the queue receives higher priority over other traffic at the router and receives a bandwidth reserved for the queue associated with the label identifying the traffic engineering tunnel.

9. (Previously Presented) The method of claim 8 wherein the queue is shared between two or more traffic engineering tunnels and is thereby associated with two or more labels identifying the two or more traffic engineering tunnels.

10. (Original) The method of claim 9 wherein the reserved bandwidth for the queue comprises a sum of bandwidth reserved for each of the two or more traffic engineering tunnels.

11. (Original) The method of claim 9 wherein the queue is an input queue and wherein the queue is shared between two or more traffic engineering tunnels with a same head end router.

12. (Original) The method of claim 9 wherein the queue is an output queue and wherein the queue is shared between two or more traffic engineering tunnels with a same tail end router.

13. (Original) The method of claim 8 wherein the label is an MPLS TE label.

14. (Previously Presented) A router comprising:

(i) a plurality of interfaces;

(ii) a first processing module that sorts packets received at an interface into those packets that are carried inside a traffic engineering tunnel and those packets that are not carried inside a traffic engineering tunnel;

(iii) a first queue which receives from the first processing module only packets carried inside a traffic engineering tunnel;

(iv) a second queue which receives from the first processing module packets that are not carried inside a traffic engineering tunnel; and

(v) a second processing module that receives packets from the first and second queues and gives higher priority to packets received from the first queue.

15. (Original) The router of claim 14 wherein the first processing module sorts the packets at the interface by reading a label in the packet that identifies the traffic engineering tunnel.

16. (Original) The router of claim 15 wherein the first queue is associated with the label identifying the traffic engineering tunnel.

17. (Previously Presented) The router of claim 16 wherein the first queue is shared between two or more traffic engineering tunnels.

18. (Original) The router of claim 17 wherein the second processing module processes the packets received from the first and second queues so as to ensure that

bandwidth allocated to packets in the first queue is at least as great as a reserved bandwidth for the traffic engineering tunnel.

19. (Currently Amended) The router of claim 18 wherein the reserved bandwidth for the first queue comprises a sum of bandwidth reserved for each of the two or more traffic engineering tunnels.

20. (Original) The router of claim 17 wherein the first and second queues are input queues and wherein the first queue is shared between two or more traffic engineering tunnels identified as having a same head end router.

21. (Original) The router of claim 17 wherein the first and second queues are output queues and wherein the first queue is shared between two or more traffic engineering tunnels identified as having a same tail end router.

22. (Original) The router of claim 15 wherein the label is an MPLS TE label.